Grain Transportation Report

A weekly publication of the
Transportation and Marketing Programs/Transportation Services Branch
www.ams.usda.gov/tmdtsb/grain

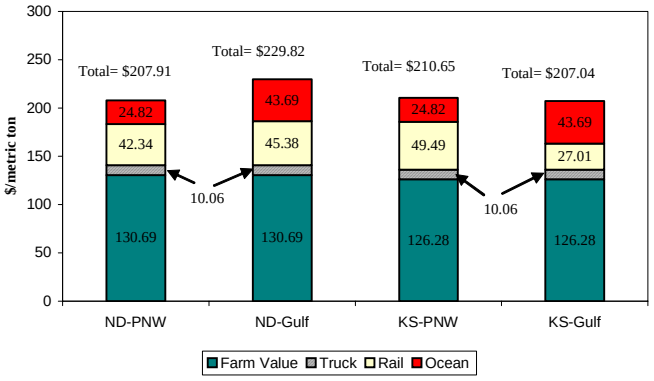
Apr. 6, 2006

Contents

The next release is Apr. 13 '06

Cost of Shipping U.S. Wheat to Japan Increases. Wheat transportation costs from North Dakota and Kansas to Japan increased during the fourth quarter 2005, mainly because of increases in ocean rates and truck rates during this period (tables 1and 2). Transportation costs from Kansas to Japan through the PNW increased more than 5 percent (table 1). However, the cost to ship from North Dakota to Japan through the Pacific Northwest (PNW) decreased slightly due to a drop in rail rates (See Table 1). The cost of shipping from Kansas to Japan through the U.S. Gulf increased nearly 9 percent while the cost of shipping from North Dakota through the Gulf increased 11 percent (table 2). The total landed cost for shipping wheat from both states to Japan ranged from $207 to $230 per metric ton (figure 1). Total fourth quarter transportation costs averaged 37 to 43 percent of the total landed costs (tables 1 and 2).

Figure 1- Cost of shipping wheat from Kansas and North Dakota to Japan, 4th Quarter 2005



Source: USDA/AMS/Transportation and Marketing Programs

Ocean freight rates for wheat shipped from the PNW to Japan increased 11 percent from the third quarter 2005 (table 1), largely due to increased demand for multi-purpose vessels *(See GTR dated 3/02/06)*. In comparison, ocean rates for wheat shipped from the U.S. Gulf to Japan increased 14 percent during the fourth quarter (table 2).

Table 1 -- Quarterly KS & ND to Japan through PNW rate comparisons, 2005

	KS			ND		
Mode	2005 3rd qtr	2005 4th qtr	Percent change	2005 3rd qtr	2005 4th qtr	Percent change
	- $/metric ton -		%	- $/metric ton -		%
Truck	8.90	10.06	13.03	8.90	10.06	13.03
Rail	48.69	49.49	1.64	46.06	42.34	-8.08
Ocean vessel	22.39	24.82	10.85	22.39	24.82	10.85
Transportation Costs	79.98	84.37	5.49	77.35	77.22	-0.17
Farm Value[1]	117.70	126.28	7.29	121.87	130.69	7.24
Total Landed Cost	197.68	210.65	6.56	199.22	207.91	4.36
Transport % of landed cost	40.46	40.05		38.83	37.14	

Table 2 -- Quarterly KS & ND to Japn through Gulf rate comparisons, 2005

	KS			ND		
Mode	2005 3rd qtr	2005 4th qtr	Percent change	2005 3rd qtr	2005 4th qtr	Percent change
	- $/metric ton -		%	- $/metric ton -		%
Truck	8.90	10.06	13.03	8.90	10.06	13.03
Rail	27.01	27.01	0.00	41.78	45.38	8.62
Ocean vessel	38.38	43.69	13.84	38.38	43.69	13.84
Transportation Costs	74.29	80.76	8.71	89.06	99.13	11.31
Farm Value[1]	117.70	126.28	7.29	121.87	130.69	7.24
Total Landed Cost	191.99	207.04	7.84	210.93	229.82	8.96
Transport % of landed cost	38.69	39.01		42.22	43.13	

[1] Source: USDA/NASS, wheat prices for North Dakota (mainly HRS) and Kansas (mainly HRW)

In Kansas and North Dakota, the cost of moving wheat by truck to a rail-served grain elevator increased 13 percent during the fourth quarter (tables 1 and 2), due to escalating diesel fuel costs. Fourth quarter rail rates from Kansas to the PNW increased 2 percent while rail rates from North Dakota to the PNW dropped 8 percent due to the lowering of tariffs in the Upper Midwest beginning in September (table 1). The cost of moving wheat by rail from Kansas to the Gulf remained unchanged, but the cost from North Dakota to the Gulf increased 9 percent (table 2).

According to the Foreign Agricultural Service (FAS), total wheat exports to Japan totaled 2.98 million metric tons last year (calendar), accounting for 11 percent of total U.S. wheat exports. While total wheat exports to Japan decreased slightly in 2005, export sales of hard red winter and durum wheat have continued to increase compared to 2004. (*See GTR dated 3/30/06).* *Johnny.Hill@usda.gov*

Grain Transportation Indicators

Table 1--Grain transport cost indicators*

	Truck	Rail**	Barge	Ocean	
Week ending				Gulf	Pacific
04/05/06	176	-48	192	160	184
Compared with last week	↑	↓	↑	↓	↓

*Indicator: Base year 2000 = 100; Weekly updates include truck = diesel ($/gallon); rail = nearby secondary rail market ($/car); barge = spot Illinois River basis (index = percent of tariff rate); and ocean = routes to Japan ($/metric ton)

**The rail indicator is not an index. It is the difference between the nearby secondary rail market bid for this week and the average bid for year 2000 (+) 100.

Source: Transportation & Marketing Programs/AMS/USDA

Table 2--Market update: U.S. origins to export position price spreads ($/bushel)

Commodity	Origin--destination	3/30/2006	3/24/2006
Corn	IL--Gulf	-0.59	-0.62
Corn	NE--Gulf	-0.79	-0.86
Soybean	IA--Gulf	-0.81	-0.85
HRW	KS--Gulf	-0.84	-0.82
HRS	ND--Portland	-1.75	-1.55

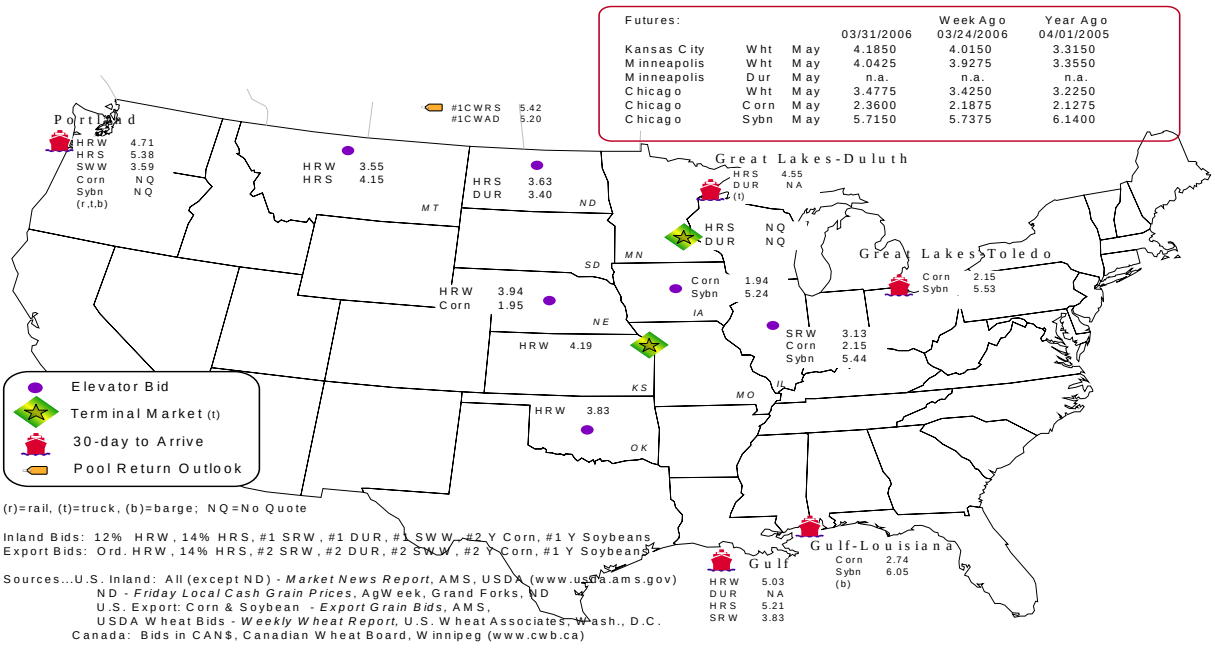
Note: nq = no quote

Source: Transportation & Marketing Programs/AMS/USDA

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1

Grain bid summary



Rail Transportation

Table 3--Rail deliveries to port (carloads)*

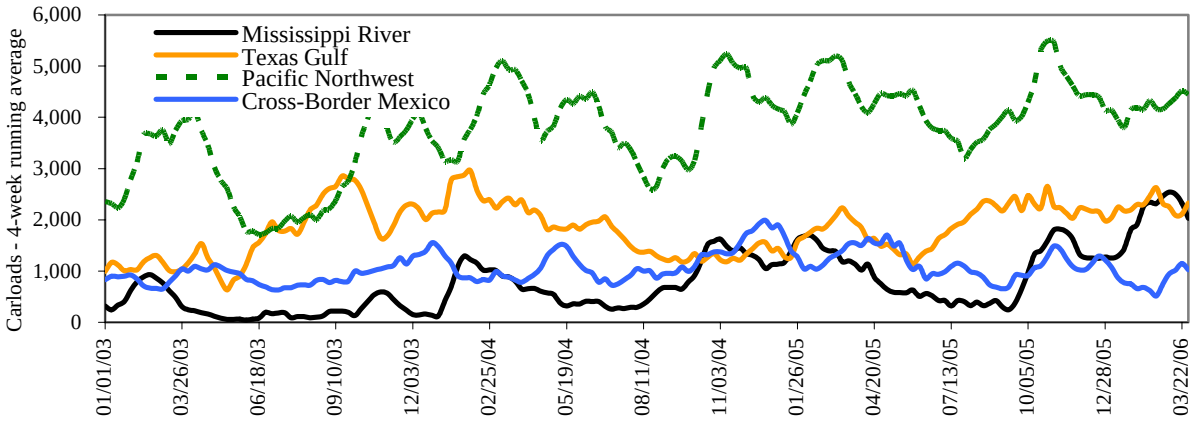
Week ending	Mississippi Gulf***	Texas Gulf	Cross-Border Mexico****	Pacific Northwest	Atlantic & East Gulf	Total
3/29/2006[p]	1,125	2,499	753	3,996	582	8,955
3/22/2006[r]	1,806	2,619	1,163	4,462	594	10,644
2006 YTD	26,914	30,229	10,402	55,305	7,025	129,875
2005 YTD	18,008	23,671	17,452	59,441	6,147	124,719
2006 as % of 2005	149	128	60	93	114	104
Total 2005**	50,677	99,864	60,879	223,328	15,752	450,500
Total 2004	43,102	92,073	59,102	209,625	10,986	414,888

(*) Incomplete Data; as of 9/22/04, Cross-Border movements included; (**) Includes 53rd week; (***) Mississippi Gulf data back to January, 2004 from several new sources has been added; (********) **Cross-border Mexico data for 2004 and 2005 has been amended to reflect amendments submitted by our sources.** YTD= year-to-date; p=preliminary data; r = revised data

Railroads originate approximately 40 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2

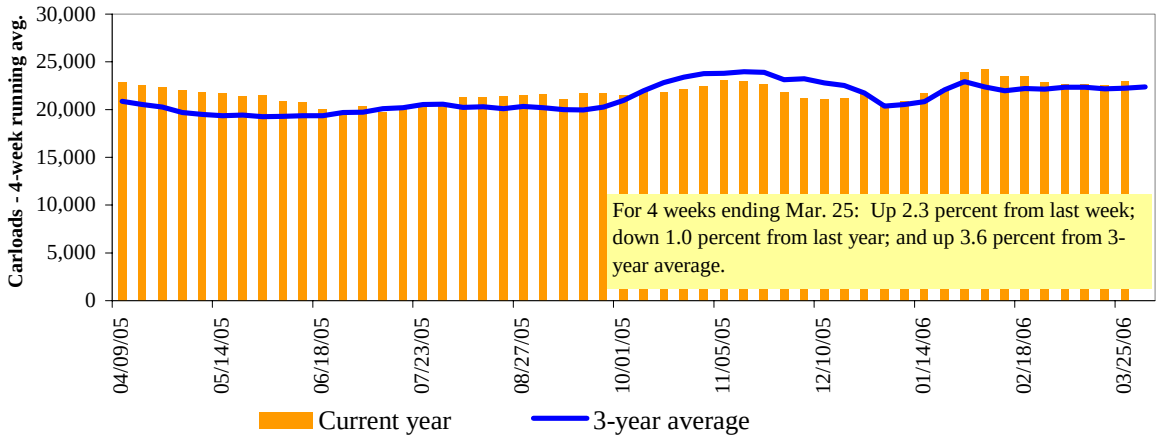
Rail deliveries to port



Source: Transportation & Marketing Programs/AMS/USDA

Figure 3

Total Weekly U.S. Class I Railroad Grain Car Loadings



Source: Association of American Railroads

Table 4--Class I rail carrier grain car bulletin (grain carloads originated)

	East		West			U.S. total	Canada	
Week ending	CSXT	NS	BNSF	KCS	UP		CN	CP
03/25/06	2,695	3,649	11,035	580	5,678	23,637	4,022	3,773
This week last year	3,436	3,509	9,976	720	6,188	23,829	4,243	3,101
2006 YTD	38,106	39,372	121,196	6,471	73,969	279,114	56,409	53,543
2005 YTD	38,046	41,428	116,912	8,266	71,843	276,495	54,300	46,480
Last 4 weeks as % of 2005[1]	94	95	104	74	98	99	101	133
2006 YTD as % of 2005 YTD	100	95	104	78	103	101	104	115
Total 2005	152,060	167,465	476,033	27,459	307,170	1,130,187	225,817	215,145

[1]As a percent of the same period in 2005.

Source: Association of American Railroads (www.aar.org); YTD = year-to-date

Table 5--Rail car auction offerings*, week ending 04/01/06 ($/car)**

Delivery for:	May-06	Jun-06	Jul-06
BNSF[1]			
COT/N. grain	no bids	no offer	$32
COT/S. grain	no bids	no bids	$11
UP[2]			
GCAS/Region 1	no bids	no offer	no offer
GCAS/Region 2	no bids	no offer	no offer

*Auction offerings are for single-car and unit train shipments only.

**Average premium/discount to tariff, last auction

[1]BNSF - COT = Certificate of Transportation

N includes: ID, MN, MT, ND, OR, SD, WA, WI, WY, and Manitoba, Canada.

S includes: CO, IA, IL, KS, MO, NE, OK, TX, NM, AZ, CA, UT, and NV.

[2]UP - GCAS = Grain Car Allocation System

Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

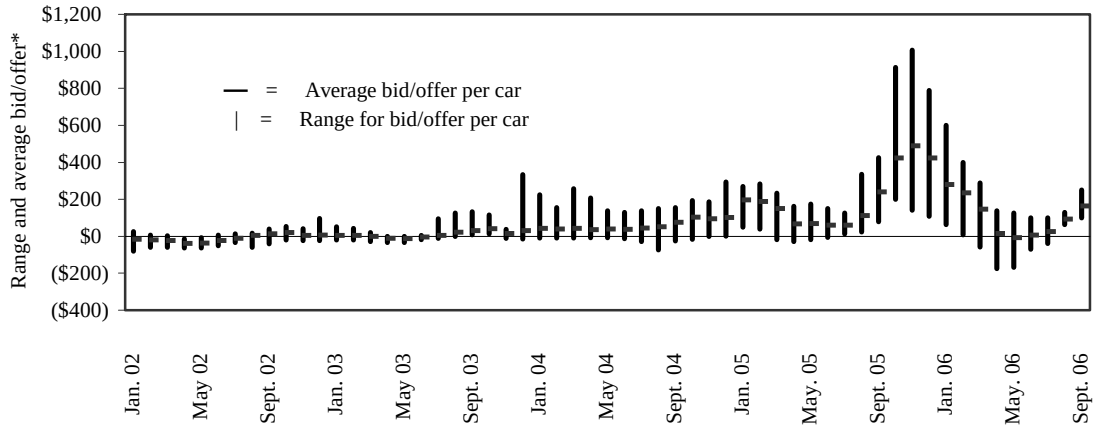
Source: Transportation & Marketing Programs/AMS/USDA

Rail service may be ordered directly from the railroad via **auction** for guaranteed service, or via tariff for nonguaranteed service, or through the secondary railcar market.

The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4

Secondary rail car market, delivery month-year



*up to 6 months of trading

Source: Transportation & Marketing Programs/AMS/USDA

Average bid/offer is the simple average of all the weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Range for bid/offer shows the range of average weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Table 6--Weekly secondary rail car market, week ending 04/01/06 ($/car)*

	Delivery period			
	May-06	**Jun-06**	**Jul-06**	**Aug-06**
BNSF-GF	-$117	-$8	$38	$85
Change from last week	-$29	$0	$0	$0
UP-Pool	-$169	-$46	$28	$129
Change from last week	$0	$0	$0	$0

*Average premium/discount to tariff, $/car-last week

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,
Missing value = no bid quoted; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

Data from Atwood/ConAgra, Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.

Table 7--Tariff rail rates for unit and shuttle train shipments*

Effective date: 4/3/2006	Origin Region	Destination Region	Rate/car	Rate/metric ton	Rate/bushel**
Unit train*					
Wheat	Chicago, IL	Albany, NY	$1,861	$20.51	$0.56
	Kansas City, MO	Galveston, TX	$2,020	$22.27	$0.61
	South Central, KS	Galveston, TX	$2,450	$27.01	$0.74
	Minneapolis, MN	Houston, TX	$3,020	$33.29	$0.91
	St. Louis, MO	Houston, TX	$2,360	$26.01	$0.71
	South Central, ND	Houston, TX	$4,149	$45.73	$1.24
	Minneapolis, MN	Portland, OR	$3,963	$43.68	$1.19
	South Central, ND	Portland, OR	$3,963	$43.68	$1.19
	Northwest, KS	Portland, OR	$4,490	$49.49	$1.35
	Chicago, IL	Richmond, VA	$2,161	$23.82	$0.65
Corn	Chicago, IL	Baton Rouge, LA	$2,610	$28.77	$0.73
	Council Bluffs, IA	Baton Rouge, LA	$2,470	$27.23	$0.69
	Kansas City, MO	Dalhart, TX	$2,365	$26.07	$0.66
	Minneapolis, MN	Portland, OR	$3,130	$34.50	$0.88
	Evansville, IN	Raleigh, NC	$1,961	$21.62	$0.55
	Columbus, OH	Raleigh, NC	$1,850	$20.39	$0.52
	Council Bluffs, IA	Stockton, CA	$3,606	$39.75	$1.01
Soybeans	Chicago, IL	Baton Rouge, LA	$2,655	$29.27	$0.80
	Council Bluffs, IA	Baton Rouge, LA	$2,515	$27.72	$0.75
	Minneapolis, MN	Portland, OR	$3,610	$39.79	$1.08
	Evansville, IN	Raleigh, NC	$1,961	$21.62	$0.59
	Chicago, IL	Raleigh, NC	$2,561	$28.23	$0.77
Shuttle Train*					
Wheat	St. Louis, MO	Houston, TX	$1,820	$20.06	$0.55
	Minneapolis, MN	Portland, OR	$3,763	$41.48	$1.13
Corn	Fremont, NE	Houston, TX	$2,124	$23.41	$0.59
	Minneapolis, MN	Portland, OR	$3,024	$33.33	$0.85
Soybeans	Council Bluffs, IA	Houston, TX	$2,412	$26.59	$0.72
	Minneapolis, MN	Portland, OR	$3,170	$34.94	$0.95

*A unit train refers to shipments of at least 52 cars. Shuttle train rates are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

**Approximate load per car = 100 short tons: corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

Table 8--Tariff rail rates for U.S. bulk grain shipments to Mexico, 2005

Effective date: 4/3/06

Commodity	Origin State	Border crossing region	Train size	Rate[1]	Rate/metric ton	Rate/bushel**
Wheat	KS	Brownsville, TX	Shuttle	$2,851	$29.13	$0.79
	ND	Eagle Pass, TX	Unit	$4,211	$43.03	$1.17
	OK	El Paso, TX	Shuttle	$2,235	$22.84	$0.62
	OK	El Paso, TX	Unit	$2,432	$24.85	$0.68
	AR	Laredo, TX	Unit	$2,383	$24.35	$0.66
	IL	Laredo, TX	Unit	$3,188	$32.57	$0.89
	MT	Laredo, TX	Shuttle	$3,980	$40.67	$1.11
	TX	Laredo, TX	Shuttle	$2,165	$22.12	$0.60
	MO	Laredo, TX	Shuttle	$2,731	$27.90	$0.76
	WI	Laredo, TX	Unit	$3,405	$34.79	$0.95
Corn	NE	Brownsville, TX	Shuttle	$3,543	$36.20	$0.92
	NE	Brownsville, TX	Unit	$3623*	$37.02	$0.94
	IA	Eagle Pass, TX	Unit	$3,773	$38.55	$0.98
	MO	Eagle Pass, TX	Shuttle	$3364*	$34.37	$0.87
	NE	Eagle Pass, TX	Shuttle	$3764*	$38.46	$0.98
	IA	Laredo, TX	Shuttle	$3,696	$37.76	$0.96
Soybean	IA	Brownsville, TX	Shuttle	$3,318	$33.90	$0.92
	MN	Brownsville, TX	Shuttle	$3,614	$36.93	$1.00
	NE	Brownsville, TX	Shuttle	$3,127	$31.95	$0.87
	NE	Eagle Pass, TX	Shuttle	$3,203	$32.73	$0.89
	IA	Laredo, TX	Unit	$3,357	$34.30	$0.93

A unit train refers to shipments of at least 52 cars. Shuttle train are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

[1]Rates are based upon published tariff rates for high-capacity rail cars.

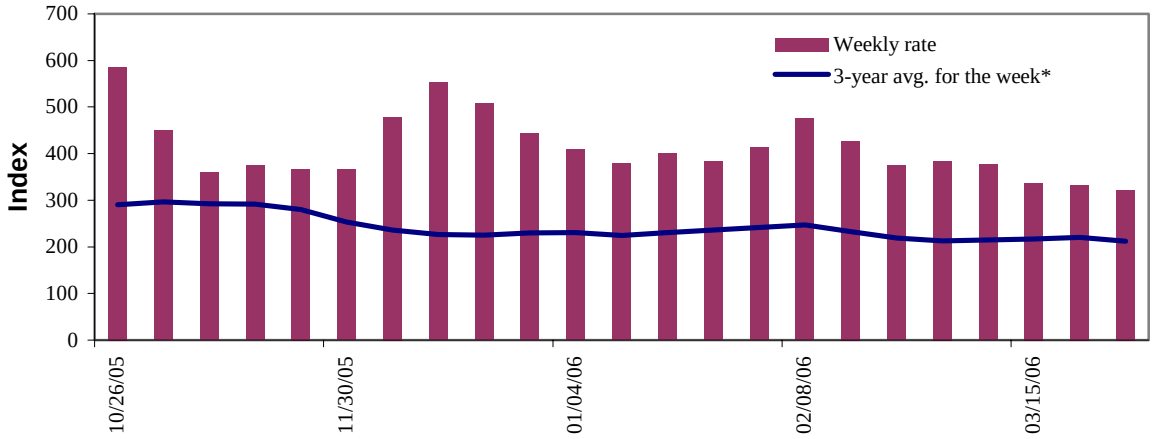
*High-capacity rate not available, rate estimated using published low-capacity tariff rate x 1.08

**Approximate load per car = 97.87 metric tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

Sources: www.bnsf.com, www.uprr.com

Barge Transportation

Figure 5
Illinois River barge rate index - quotes



Note: Index = percent of tariff rate; *4-week moving average
Source: Transportation & Marketing Programs/AMS/USDA

The **Illinois River barge rate index** averaged 183 percent of the **benchmark tariff rates** between 1999 and 2001, based on weekly market quotes. The **index**, along with **rate quotes** and **futures market** bids are indicators of grain transport supply and demand.

Table 9--Barge rate quotes: southbound barge freight

Location	3/29/2006	3/22/2006	April '06	June '06
Twin Cities	372	n/a	373	375
Mid-Mississippi	327	358	330	338
Illinois River	322	333	323	333
St. Louis	263	301	267	290
Lower Ohio	250	296	253	285
Cairo-Memphis	240	242	243	270

Index = percent of tariff, based on 1976 tariff benchmark rate
Source: Transportation & Marketing Programs/AMS/USDA

Calculating barge rate per ton:
(Index * 1976 tariff benchmark rate per ton)/100

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map (see figure 6).

Note: The Illinois barge rate is for Beardstown, IL, La Grange Lock & Dam (L&D 8).

Figure 6
Benchmark tariff rates

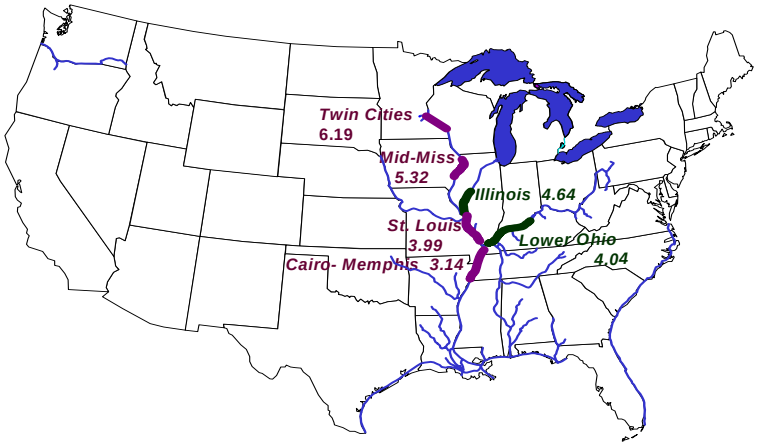
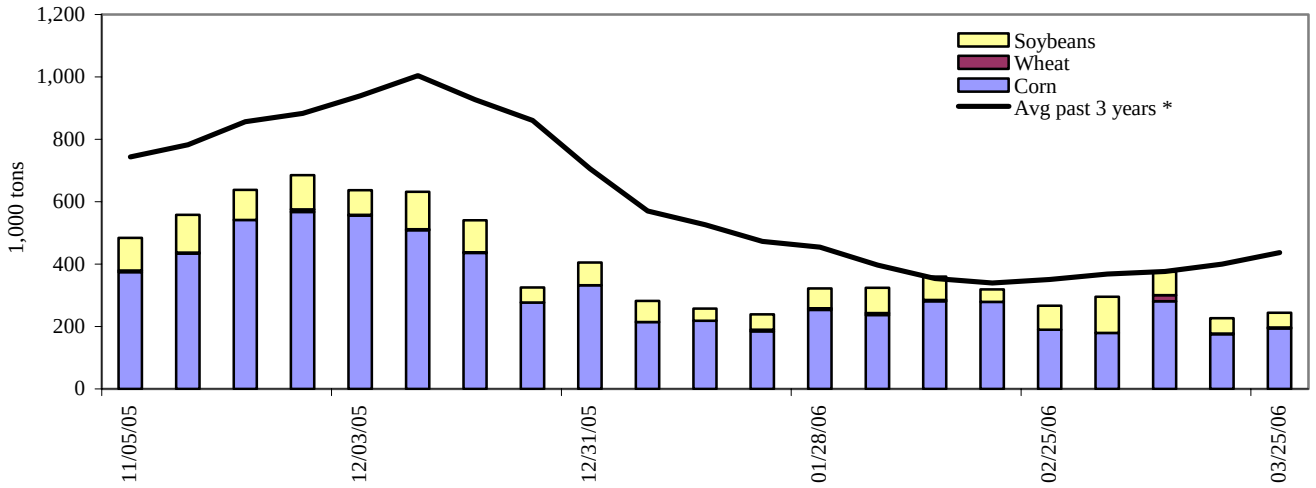


Figure 7

Barge movements on the Mississippi River (Locks 27 - Granite City, IL)



* 4-week moving average

Source: Transportation & Marketing Programs/AMS/USDA

Table 10--Barge grain movements (1,000 tons)

Week ending 3/25/2006	Corn	Wheat	Soybean	Other	Total
Mississippi River					
Rock Island, IL (L15)	32	0	12	2	45
Winfield, MO (L25)	85	3	34	0	122
Alton, IL (L26)	219	3	48	0	270
Granite City, IL (L27)	194	3	47	14	258
Illinois River (L8)	175	0	14	0	189
Ohio River (L52)	108	3	28	0	139
Arkansas River (L1)	0	19	27	17	63
2006 YTD	4,509	300	1,740	245	6,794
2005 YTD	4,107	364	2,140	197	6,808
2006 as % of 2005 YTD	110	82	81	124	100
Total 2005	23,761	1,620	7,276	731	33,388

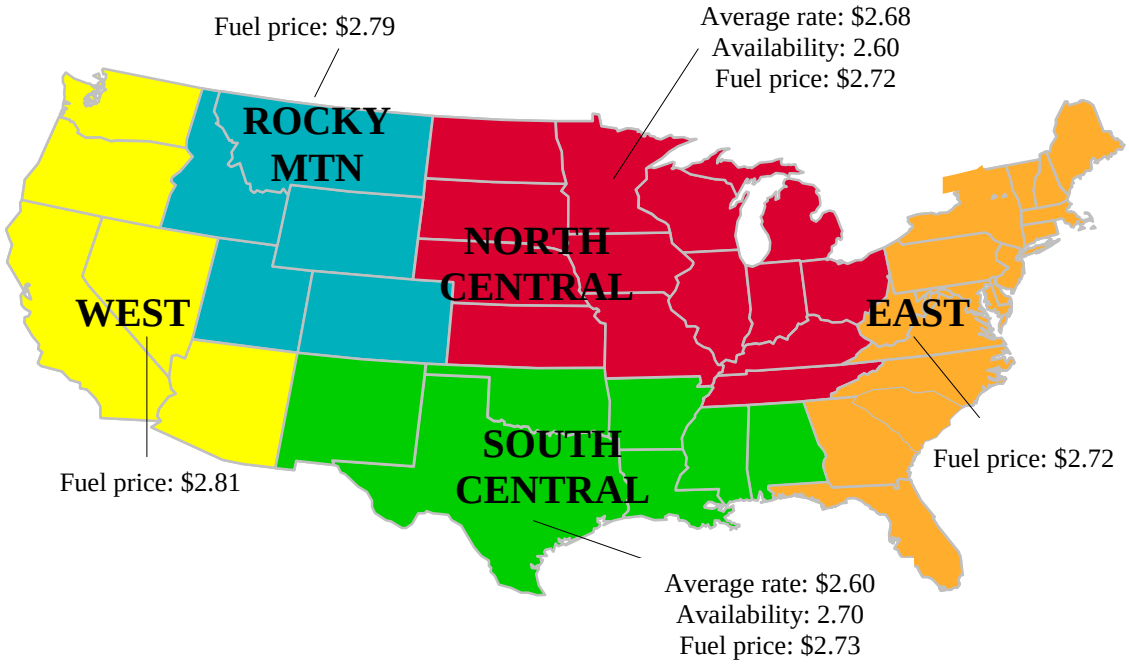
YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

Source: U.S. Army Corp of Engineers (www.mvr.usace.army.mil/mvrimi/omni/webrpts/default.asp)

Note: Total may not add exactly, due to rounding

Truck Transportation

Figure 8
U.S. grain truck market advisory, 4th quarter 2005*



*Average rate per loaded mile, based on truck rates for trips of 25, 100, and 200 miles
Note: Fuel prices are a quarterly average (unit per gallon)
Fuel price data source: Energy Information Administration, U.S. Department of Energy, www.eia.doe.gov

Table 11--U.S. grain truck market overview, 4th quarter 2005

Region	25 miles	100 miles	200 miles	Truck availability	Truck activity	Future truck activity
				Rating compared to same quarter last year		
	[1]Rate per mile			1=Very easy to 5=Very difficult	1=Much lower to 5=Much higher	
National average[2]	**3.31**	**2.46**	**2.26**	**2.6**	**2.9**	**2.9**
North Central region	3.23	2.51	2.29	2.6	3.0	3.0
Rocky Mountain	4.58	2.35	1.95	2.8	3.0	3.0
South Central	3.00	2.42	2.39	2.7	2.5	2.7
West	n/a	n/a	n/a	2.0	3.5	3.0

[1]Rates are based on trucks with 80,000 lb gross vehicle weight limit
[2]National average includes: AL, AR, CO, IA, ID, IL, IN, KS, LA, MN, MO, MS, MT, ND, NE, OH, OK, OR, SD, TX, WA, WI, and WY.
Source: Transportation and Marketing Programs/AMS/USDA

The **weekly diesel price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37 percent of the estimated variable cost.

Table 12--Retail on-highway diesel prices*, week ending 4/03/06 (US$/gallon)

			Change from	
Region	**Location**	**Price**	**Week ago**	**Year ago**
I	East Coast	2.639	0.053	0.340
	New England	2.731	0.031	0.304
	Central Atlantic	2.727	0.046	0.315
	Lower Atlantic	2.593	0.057	0.355
II	Midwest[1]	2.578	0.055	0.320
III	Gulf Coast[2]	2.579	0.051	0.339
IV	Rocky Mountain	2.629	0.028	0.268
V	West Coast	2.753	0.055	0.212
	California	2.812	0.085	0.231
Total	U.S.	2.617	0.052	0.314

*Diesel fuel prices include all taxes.

Source: Energy Information Administration/U.S. Department of Energy (www.eia.doe.gov)

[1]Same as North Central

[2]Same as South Central

Grain Exports

Table 13--U.S. export balances (1,000 metric tons)

	Wheat						Corn	Soybeans	Total
Week ending 1/	HRW	SRW	HRS	SWW	DUR	All wheat			
3/23/2006	1,325	278	1,056	681	231	3,571	9,285	1,898	14,754
This week year ago	1,436	226	1,298	553	98	3,611	7,636	2,790	14,037
Cumulative exports-crop year 2/									
2005/06 YTD	9,097	1,711	6,248	3,571	624	21,251	27,321	19,044	67,616
2004/05 YTD	7,997	2,983	6,519	4,158	569	22,226	25,690	24,248	72,164
2005/06 as % of 2004/05	114	57	96	86	110	96	106	79	94
2004/05 Total	9,407	3,217	8,083	4,773	686	26,117	44,953	29,878	100,948
2003/04 Total	12,697	3,785	6,928	4,895	1,053	29,359	47,704	24,108	101,171

Note: YTD = year-to-date. Crop year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31, 1/ = Current unshipped export sales to date

2/ = Shipped export sales to date

Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Figure 9

U.S. grain, unshipped export balance, including wheat, corn, and soybean sales

Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Table 14--Select U.S. port regions - grain inspections for export (1,000 metric tons)

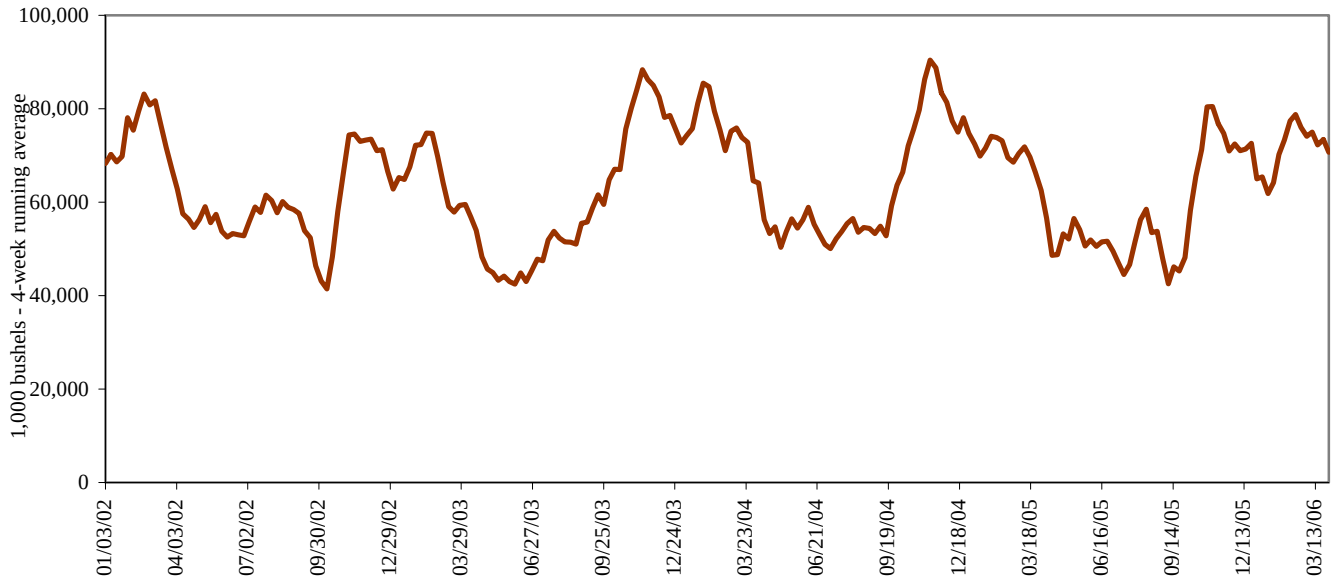
	Pacific Region			Mississippi Gulf			Texas Gulf			Port Region total		
Week ending	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Pacific	Mississippi	Texas
03/30/06	150	300	120	30	586	217	114	111	0	569	833	225
2006 YTD	2,869	2,269	1,868	1,111	8,700	5,396	2,024	540	15	7,006	15,206	2,579
2005 YTD	2,754	2,273	2,228	1,459	6,762	6,201	1,590	215	6	7,255	14,423	1,811
2006 as % of 2005	104	100	84	76	129	87	127	251	260	97	105	142
2005 Total *	10,801	10,104	6,225	4,643	27,596	14,793	7,743	810	36	27,130	47,032	8,589

Source: Grain Inspection, Packers and Stockyards Aministration/USDA (www.gipsa.usda.gov); YTD: year-to-date; *includes weekly revisions

The United States exports approximately one-quarter of the grain it produces. On average, it includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 55 percent of these U.S. export grain shipments departed through the Mississippi Gulf region in 2004.

Figure 10

U.S. grain inspected for export (wheat, corn, and soybeans)



Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)

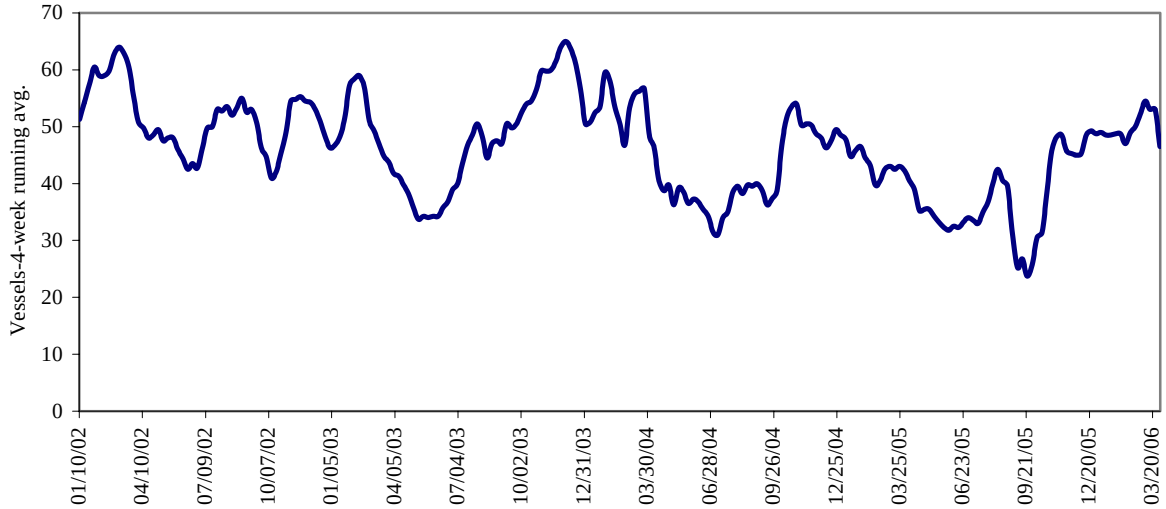
Table 15--Weekly port region grain ocean vessel activity (number of vessels)

	Gulf			Pacific Northwest	Vancouver B.C.
Date	In port	Loaded 7-days	Due next 10-days	In port	In port
3/30/2006	16	35	46	6	4
3/23/2006	18	47	52	7	6
2005 range	(11..57)	(10..56)	(18..76)	(2..16)	(0..17)
2005 avg.	27	39	53	9	7

Source: Transportation & Marketing Programs/AMS/USDA

Figure 11

Gulf Port grain vessel loading (past 7 days)



Source: Transportation & Marketing Programs/AMS/USDA

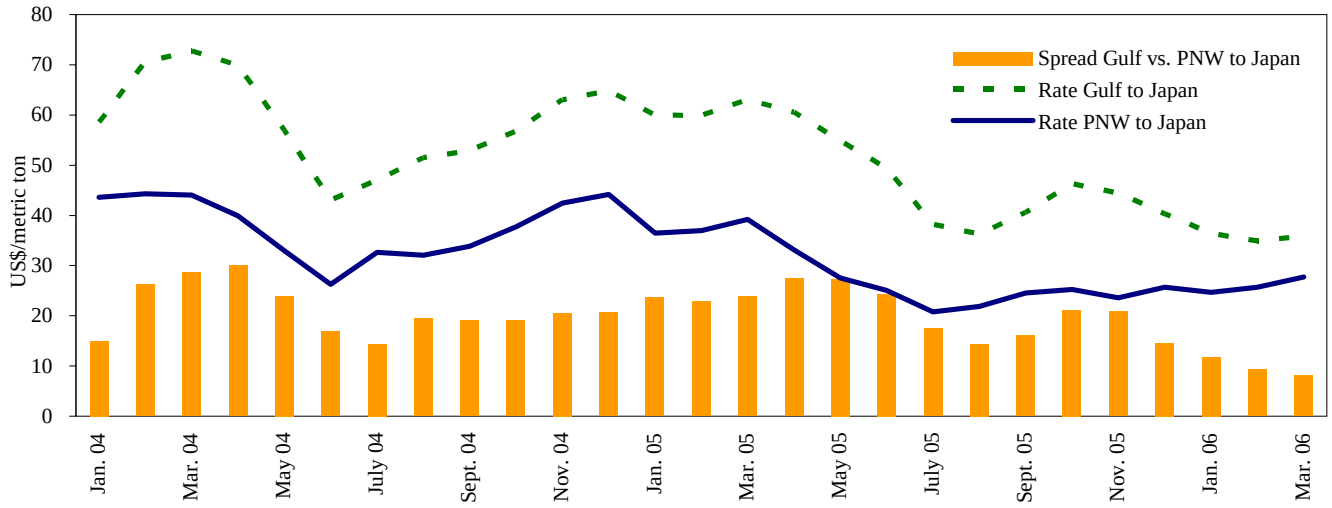
Table 16--Quarterly ocean freight rates (average rates & percentage changes) (US$/metric ton)

Countries/ regions	2005 4th qtr	2004 4th qtr	Percent change	Countries/ regions	2005 4th qtr	2004 4th qtr	Percent change
Gulf to				**Pacific NW to**			
Japan	46.75	60.83	-23	Japan	---	---	---
China		56.35	---	**Argentina/Brazil to**			
N. Africa	31.75	---	---	N. Africa	42.67	---	---
Med. Sea	31.75	---	---	Meditteranean	40.20	---	

Source: Maritime Research, Inc. (www.maritime-research.com)

Figure 12

Grain vessel rates, U.S. to Japan



Source: Baltic Exchange (www.balticexchange.com)

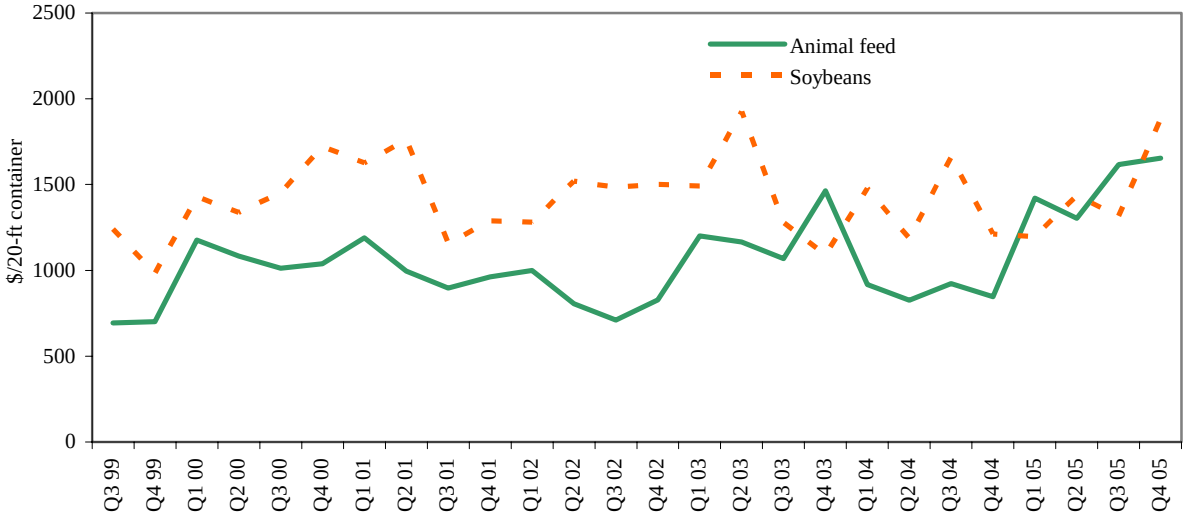
Table 17--Ocean freight rates for selected shipments, week ending 4/1/06

Export region	Import region	Grain	Month	Volume loads (metric tons)	Freight rate ($/metric ton)
U.S. Gulf	China	Hvy Grain	Feb 20/28	55,000	31.00
U.S. Gulf	N. China	Hvy Grain	Feb 20/28	55,000	29.75
United Kingdom	Thailand	Wheat	Feb 25/Mar 10	42,000	21.50
PNW	Pakistan*	Soybeans	Feb 16/27	10,000	59.45
Brazil	N. China	Hvy Grain	Feb 10/18	58,000	27.50
Brazil	N. France	Grains	Mar 12/20	25,000	26.00
River Plate	Poland	Grains	Feb 21/26	30,000	36.00
River Plate	Poland	Grains	Apr 1/10	25,000	34.75

Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option
*75 percent of food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are limited in availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.
Source: Maritime Research Inc. (www.maritime-research.com)

Figure 13

Weighted average rates[1] for containerized shipments of animal feed and soybeans to selected Asian countries



[1]Animal Feed: Busan-Korea (12%), Kaohsiung-Taiwan (34%), Tokyo-Japan (35%), Hong Kong (13%), Bangkok-Thailand (6%) and soybeans: Busan-Korea (1%), Keelung-Taiwan (89%), Tokyo-Japan (8%), Bangkok-Thailand (1%), Hong Kong (1%) Quarter 4, 2005.

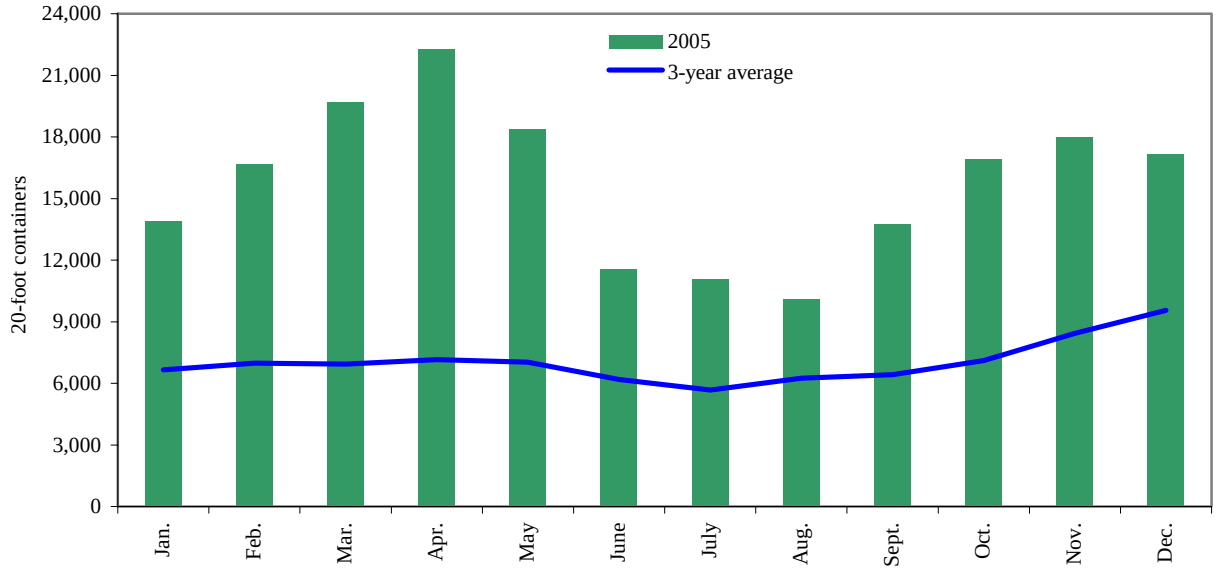
Source: Ocean Rate Bulletin, Transportation & Marketing Programs/AMS/USDA

Container ocean freight rates – average rate per twenty-foot equivalent unit (TEU) weighted by shipping line market share and trade route.

During 2004, containers were used to transport 2 percent of total U.S. grain exported, and 3 percent of total U.S. grain exported to Asia.

Figure 14

Monthly shipments of containerized grain to Asia for 2005 compared with a 3-year average

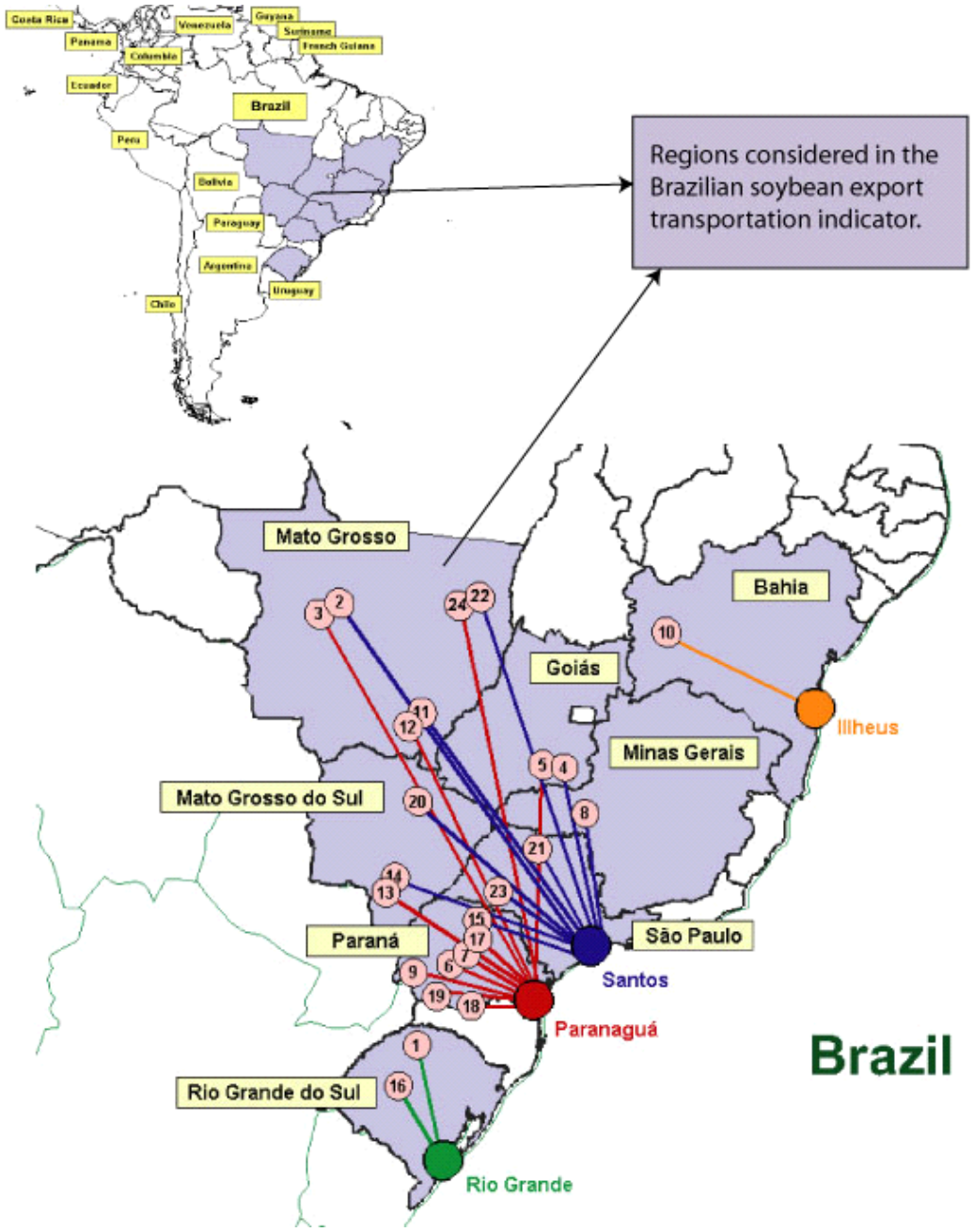


Source: Port Import Export Reporting Service (PIERS), *Journal of Commerce*

Note: PIERS data is available with a lag of approximately 40 days

Brazil Transportation

Figure 15
Routes and Regions considered in the Brazilian soybean export transportation indicator[1]



[1]Regions comprised 84 percent of Brazilian soybean production, 2003
Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 18--Truck rates for selected Brazilian soybean export transportation routes, 4th quarter 2005

Route #	Origin[1] (reference city)	Destination	Distance (miles)[2]	Weight(%)[3]	Freight price (per 100 miles)[4]
1	Northwest RS[5](Cruz Alta)	Rio Grande	288	16.6	4.58
2	North MT(Sorriso)	Santos	1190	10.1	6.94
3	North MT(Sorriso)	Paranaguá	1262	9.5	6.41
4	South GO(Rio Verde)	Santos	587	7.0	7.25
5	South GO(Rio Verde)	Paranaguá	726	5.6	5.74
6	North Center PR(Londrina)	Paranaguá	268	4.4	7.93
7	Western Center PR(Mamborê)	Paranaguá	311	3.9	6.41
8	Triangle MG(Uberaba)	Santos	339	3.8	9.98
9	West PR(Assis Chateaubriand)	Paranaguá	377	3.7	6.34
10	West Extreme BA(São Desidério)	Ilhéus	544	3.6	7.87
11	Southeast MT(Primavera do Leste)	Santos	901	3.6	6.97
12	Southeast MT(Primavera do Leste)	Paranaguá	975	3.3	6.22
13	Southwest MS(Maracaju)	Paranaguá	612	3.1	5.79
14	Southwest MS(Maracaju)	Santos	652	2.9	6.24
15	West PR(Assis Chateaubriand)	Santos	550	2.5	5.85
16	Western Center RS(Tupanciretã)	Rio Grande	273	2.4	5.74
17	Southwest PR(Chopinzinho)	Paranaguá	291	2.3	9.17
18	Eastern Center PR(Castro)	Paranaguá	130	2.3	9.96
19	South Center PR(Guarapuava)	Paranaguá	204	2.1	8.67
20	North Center MS(São Gabriel do Oeste)	Santos	720	2.0	5.62
21	Ribeirão Preto SP(Guairá)	Santos	314	1.5	8.27
22	Northeast MT(Canarana)	Santos	950	1.4	7.87
23	Assis SP(Palmital)	Santos	285	1.2	7.85
24	Northeast MT(Canarana)	Paranaguá	1075	1.2	6.96
	Average		**626**	**100**	**6.64**

[1]Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price

[2]Distance from the main city of the considered region to the mentioned ports

[3]The weight is directly proportional to the amount of production in each region

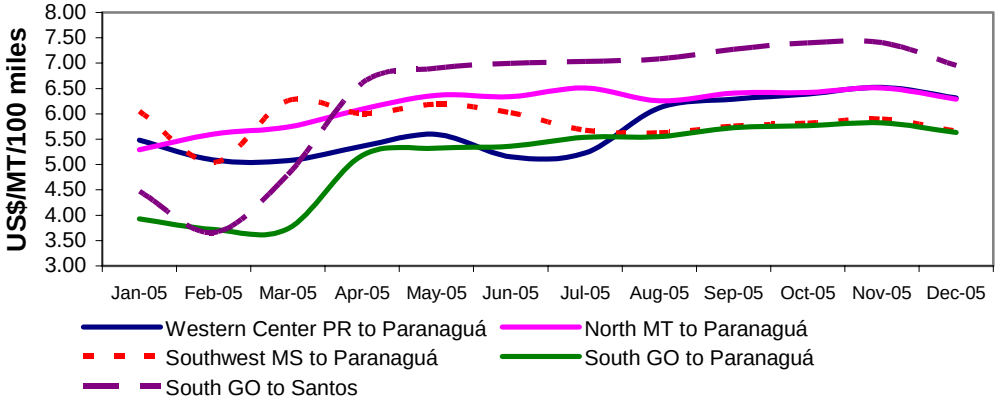
[4]US$ per metric ton (average monthly exchange rate from "Banco Central do Brasil" was used to convert Brazilian reais to the U.S. dollar)

[5]RS = Rio Grande Do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso Do Sul, SP = São Paulo

Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Figure 16

Truck rates for selected Brazilian soybean export transportation routes



Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

Table 19--Monthly Brazilian soybean export truck transportation cost index

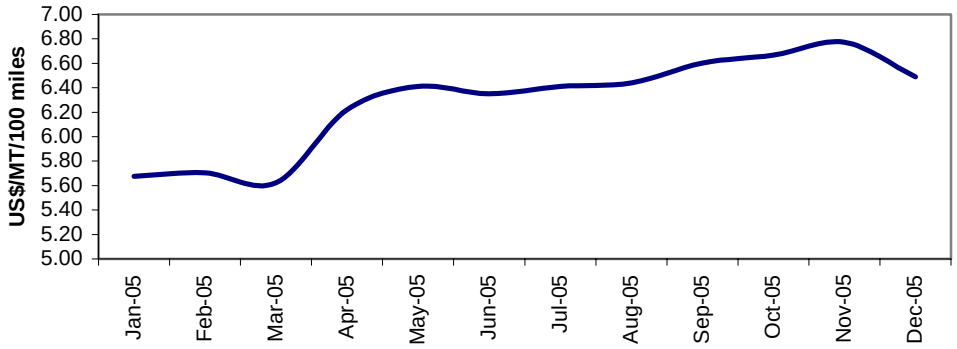
Month	Freight price* (per 100 miles)	Index variation (%) (Base: prior month)	Index value (Base: Jan. 05 = 100)
Jan. 05	5.67		100.00
Feb. 05	5.71	0.5	100.54
Mar. 05	5.62	-1.5	99.08
Apr. 05	6.22	10.6	109.61
May 05	6.41	3.1	112.96
Jun. 05	6.35	-0.9	111.90
Jul. 05	6.41	1.0	112.99
Aug. 05	6.44	0.4	113.46
Sep. 05	6.60	2.5	116.36
Oct. 05	6.67	1.0	117.52
Nov. 05	6.77	1.5	119.33
Dec. 05	6.49	-4.2	114.34

*weighted average and quoted in US$ per metric ton

Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Figure 17

Brazilian soybean export truck transportation weighted average prices, 2005



Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 20--Quarterly ocean freight rates for shipping soybeans from selected Brazilian ports to Hamburg, Germany (US$/metric ton)*

Ports	2005 1st qtr	2005 2nd qtr	2005 3rd qtr	2005 4th qtr
Santos	45.53	45.84	44.54	56.73
Paranagua	44.64	44.84**	43.54	55.73
Rio Grande	44.20	44.39	43.04	55.23

*correspond to the average actual values negotiated between shippers and carriers and weighted according to the magnitude of the shipped volumes

Source: Sistema de Informações de Fretes, SIFRECA, ESALQ/USP (University of São Paulo, Brazil)

**Revised figure

Contacts and Links

Contact Information

Coordinator		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 690-1328
Ethel Mitchell	ethel.mitchell@usda.gov	(202) 720-1378
Grain Transportation Indicators		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 690-1328
Rail		
Marvin Prater	marvin.prater@usda.gov	(202) 690-6290
Johnny Hill	johnny.hill@usda.gov	(202) 720-4211
Barge Transportation		
Karl Hacker	karl.hacker@usda.gov	(202) 690-0152
Nicholas Marathon	nick.marathon@usda.gov	(202) 690-0331
Truck Transportation		
Karl Hacker	karl.hacker@usda.gov	(202) 690-0152
Grain Exports		
Johnny Hill	johnny.hill@usda.gov	(202) 720-4211
Ocean Transportation		
Surajudeen (Deen) Olowolayemo (Freight rates and vessels)	surajudeen.olowolayemo@usda.gov	(202) 690-1328
April Taylor (Container rates)	april.taylor@usda.gov	(202) 690-1326

Subscription Information: To subscribe to the GTR for a weekly email copy, please contact Deen Olowolayemo at surajudeen.olowolayemo@usda.gov or 202-690-1328 (1303) *(printed copies are also available upon request).*

Related Websites

Agricultural Container Indicators	http://www.ams.usda.gov/tmd2/agci/
Ocean Rate Bulletin	http://www.ams.usda.gov/tmd/Ocean/index.asp